

# DOCUMENT RESUME

ED 298 259

CE 050 745

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 TITLE How To Construct a Local Labor Market Study.  
 INSTITUTION Milt Wright and Associates, Northridge, CA.  
 REPORT NO ISBN-0-942071-08-5  
 PUB DATE 87  
 NOTE 25p.  
 PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.  
 DESCRIPTORS Demand Occupations; Employment Opportunities;  
 Employment Patterns; \*Employment Statistics;  
 Guidelines; \*Labor Market; \*Occupational Surveys;  
 \*Research Methodology; Secondary Education;  
 \*Statistical Analysis; Vocational Education

## ABSTRACT

This manual was designed to help educators collect both general and specific information regarding labor market conditions within their community. Such information can be used to design employment training programs that will serve the needs of local employers as well as provide more information regarding employment opportunities for students enrolled in their programs. The manual provides the basics for researching, gathering, analyzing, and reporting on the local labor market. It explains how to use state and national studies of current labor markets in assessing local labor market changes and in identifying in what occupations employees are needed. It also introduces the means by which to construct usable data collection methods. A sample survey instrument is included.  
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# **How To Construct A Local Labor Market Study**

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# HOW TO CONSTRUCT A LOCAL LABOR MARKET SURVEY

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## INTRODUCTION

Information regarding future and current needs for trained persons in particular occupations seems to always to be in demand. Businesses, in the normal course of their operations, must recruit and hire employees drawn from a broad cross section of the community. Public officials must identify both the employment needs of businesses and employment opportunities for their residents.

There is a wealth of information regarding these labor market needs. General information can be obtained from public agencies while specific information about the local labor market can be secured within our communities. This manual will equip educators with the tools and skills necessary for collecting both general and specific information regarding labor market conditions within their communities. The data derived from these studies will help program operators to design employment training programs that will serve the needs of local employers as well as provide more information regarding employment opportunities for students enrolled in their programs. Finally it will provide methods and processes for developing labor market surveys which will satisfy federal, state, and local governmental reporting requirements.

The manual is neither a text in research methodology and reporting nor a justification of particular theories or methods; but it does provide the basics for researching, gathering, analyzing, and reporting on the local labor market. It is a practical guide on how to use state and national studies of current labor market in assessing local labor market changes, and in identifying in what occupations employers need employees. It introduces readers to the means by which to construct usable data collection methods.

## **LABOR MARKET STUDIES**

What is a labor market study and how can it help identify the vocational training needs in your community?

A labor market study is traditionally defined as a report which projects industry employment opportunities under specific situations and using a number of assumptions. Information derived from these studies is used by policy makers to project training and job needs and changes in the structure of particular occupations.

### **FEDERAL AND STATE STUDIES**

National and state agencies use large economic models to project growth and decrease in the labor force. Factors such as vital statistic trends, unemployment rate, inflation, government tax, and industry employment projections are balanced against the demand and supply-side estimates of the gross national product to project current and future employment needs. Although these factors are important in setting national and state policies and giving local communities insight into the direction of industrial and employment development, they give little insight into the specific employment needs of local businesses.

To provide information regarding the nature of local labor market conditions employment service agencies throughout the nation collect information from these local jurisdictions and their businesses and compares the information with the short and long range projections issued by national and state agencies. Most of the data are provided by local employers through tax returns where actual conditions are reported. Of course, these data are actual and not projections, so as in the case of the other studies, economic assumptions are used to project the potential growth or decrease of particular occupations. These projections are based upon the same assumptions mentioned above but are applied to the local environment. This means that the specific industries are arrayed by geographic area and projections are made according to how they fit into the national and/or state picture.

### **LOCAL LABOR MARKET STUDIES**

The question the labor market survey attempts to answer is the extent to which employment may increase, remain the same, or decrease, and in which occupations there is a high probability that these changes will occur. It is essential to develop a means by which we can take the information discussed above and apply it to a local municipality. To start we must collect data directly from business.

### LOCAL INFORMATION NEEDS

Local information can be broken down into the following categories:

- 1) History - past, present and future. To present an accurate picture of any labor market one needs to provide a context which will allow those considering the market to understand how it was, how it is and how it may be.
- 2) Categorization - a means by which the elements of the labor market can be described. These include kinds of businesses, occupations, and employees.
- 3) Change - factors affecting change. These factors include wages, demand and availability of resources.

### ROLE OF BUSINESS

Throughout the entire process of carrying out a labor market survey and collecting the information discussed above, program operators must continually be aware that the business person is the primary source of information at the local level. Businesses will provide the basic information for the study. Businesses also provide important insights into the working of the local labor market and how local, regional, and national changes affect the perception of the future of businesses in the local community. This will also allow better understanding of specific business needs in terms of employees and training as well as businesses general perception as to what factors they use to decide to expand or decrease business, to hire, retain or fire employees. Finally, you will be able to better understand how the business person's decision making process is bound to the general well-being of the local economy and why businesses, especially small ones, identify problems in terms of cost and expediency.

## GATHERING AND USING EXISTING INFORMATION

### DATA RESOURCES

What information exists already which can help you identify the employment needs within your community?

Labor market projections are available through both public and private sources. Because the vast majority are aggregate studies, they provide little detailed information about the nature of specific geographic areas or the demand for specific jobs. The studies are concerned more with the general economic and employment environment than they are with specific employment opportunities of a local community. The brief review below of the available studies provides an explanation of the studies that are necessary to begin any review of local labor markets.

#### U.S. Commerce Department

**Census: County Business Patterns.** This study is updated annually with written reports being issued every three to four years. Data is collected as a result of the analysis of reports submitted by employers to the federal Social Security Administration and the Department of Labor.

**Census Data:** This information is updated periodically with complete data compiled every ten years. Data are collected from both individuals and businesses through interviews conducted by field representatives. Special census activities are provided in areas where particular data needs are evident. Current data were collected in 1979 and 1980.

**Census of Retail, Service, and Manufacturing Industries:** This census is updated on a five-year basis. Data are collected through questionnaires or through the analysis of administrative records of other federal agencies. Current data were collected in 1982.

#### U.S. Department of Labor

**Bureau of Labor Statistics: Area Wage Surveys.** Updated on a yearly basis, these data are collected every three years by field representatives; every third year only information on employment and occupational earnings is collected.

**Employment Projections:** These data are updated on a periodic basis. Data are collected from the federal Census Bureau and the Bureau of Labor Statistics and analyzed using large economic models of business expansion and decrease. Current data were collected and analyzed in 1984.

#### Statewide Employment Data

Employment service agencies throughout the nation usually publish annual planning information guides, updated on a yearly basis, for each county in the state.

Questionnaires are sent to selected industries where increased employment is projected; then, these data are analyzed to identify those employment occupations that will experience small, moderate, and large employment expansion.

**Size of Firm:** Updated on a yearly basis, these data are collected from employers through their Contribution Return and Employment and Payroll Distribution Schedules. These reports are submitted every quarter.

**Labor Market Conditions:** These reports are updated each month. Unemployment reports for each county are collected and tabulated county-by-county and then aggregated.

**Proprietary Reports:** Example - Dun and Bradstreet. These are updated on an annual basis for major U.S. cities. Field staff interview 80% to 90% of the area businesses to determine the economic health and development of these businesses. Data collection is ongoing. Additionally, local municipalities through the sponsorship of the Chamber of Commerce and the Private Industry Council carry out special studies in areas where there is particular interest in the labor market.

**Financial Institutions.** Many financial institutions provide monthly and semi-annual reports about the economic health and occupational growth potential of the specific areas. Staff economists analyze current economic indicators from selected surveys being conducted in target areas. Data collection is ongoing.

The Department of Labor and Commerce reports can be obtained through the U.S. Printing Offices located in major municipal areas. They may also be borrowed from local community and college libraries. State employment services' reports which are prepared by the research divisions of these state departments may be ordered through the U.S. Printing offices. Local U.S. Printing offices, Private Industry Councils, and local governmental employment and training offices usually have these reports available for review. Proprietary reports are usually available from local personnel offices and banks. In most cases these businesses are more than willing to let you review these documents on site.

## COUNTY BUSINESS PATTERNS

The County Business Patterns series publishes data on the number of employees for the mid-March pay period, first quarter total payroll, number of business establishments, and number of establishments by employment size class within county and industry. These data are based primarily on administrative records and current survey data. The series is published annually. The most recent data are for 1983 and were extracted from the Bureau of the Census Standard Statistical Establishment List. These data are based primarily on administrative records and current survey data.

The significant information will be the sizes and kinds of businesses in your area. Tables reporting businesses by Standard Industrial Code provide you with a categorization of the employment environment in your community. Review of the data in these reports will give you the number of persons employed by business size and by industry. These reports also annually provide actual first quarter data on the number of persons employed in each of the industry areas.

## CENSUS OF SERVICE INDUSTRIES

Economic census reports are the major source of facts about the structure of the economy, providing information on business and industry. One report is Census of Service Industries, part of the 1982 Economic Census. Industries are defined in the Standard Industrial Code. Data for service establishments reflect both firms subject to Federal Income Tax and firms which are exempt. The 1982 census included only establishments with some payroll during the year, while previous censuses included all establishments. The data were derived from administrative records of federal agencies and a comprehensive questionnaire. Comparisons should be made with caution since definitions are not comparable in all cases. Economic census reports reflect only insured employees.

These reports provide you with a breakdown of the employment of persons within service industries. Particular attention should be given to the number of businesses in each category and the number of employees in these businesses. This will be used later for determining which businesses within a selected category should be emphasized in your interviews and analyses.

## ANNUAL PLANNING INFORMATION

This report will prove to be one of your most important assets during the research. Published by the state employment services, they give you all of the relevant information on local labor forces and industry activities as well as the economic outlook for employment and business. Most data are aggregate data collected and abstracted from previously mentioned federal and state reports. Selected occupations are reviewed in greater detail because they represent, from the national and state data, growth areas.

Included in this report are economic and employment projections for each industry by county. Projections in business activities and employment in specific occupations are presented by industry, based on turnover rates (number of positions available during a 12-month period as a result of attrition) and newly created positions. Wage and salary data are provided by industry over a three-year term.

In using these data you will soon discover that you will be able to pick up those industries and jobs that are increasing. It also provides a way to check your own preconceptions as to the nature of employment opportunities, and the growth or lack of business in your community.

### ANALYSIS OF EXISTING REPORTS

Take each report you select to use in analyzing the labor market and skim it for a general understanding of how it is organized. Although some of the reports are very large, you will quickly learn that information relative to your municipality is compact and easy to understand. Take the data offered and display it in a way that makes sense to you, using categories that meet your needs. Most of the information can be adapted to a number of different tables or report formats.

For example, the Commerce Department's County Business Patterns are arrayed in a list, but can be easily converted into a table as follows:

#### Number of Employees for the Week of March 12, 1983 by Industry

| Industry                  | Number of Employees | %          |
|---------------------------|---------------------|------------|
| Agr. Services             | 716                 | 1          |
| Mining                    | 67                  | -          |
| Construction              | 3,118               | 5          |
| Manufacturing             | 5,257               | 8          |
| Transportation & Pub Util | 2,490               | 4          |
| Wholesale                 | 3,462               | 6          |
| Retail                    | 17,999              | 29         |
| Fin, Ins & Real Estate    | 8,416               | 13         |
| Services                  | 20,019              | 32         |
| Federal Civilian Empl     | 942                 | 2          |
| <b>Total</b>              | <b>62,486</b>       | <b>100</b> |

## HOW TO ANALYZE AND USE PUBLIC DOCUMENTS

As you become familiar with the reports, begin to compare them and pick up threads that run through each. You might discover that there is a growing industry in your community which bears particular attention in your study. Or you may notice that a particular occupation is in demand across a number of industries. As these threads become more apparent you will want to make notes so that you can follow up on them during research.

Once you have developed a sense of the materials, you will want to select those data that are of particular application to your community. Set them out in tabular form and organize them according to your current research category; as you do this you will begin to organize your report according to the most important factors, and will give your readers a sense of the labor market in your area. It is not necessary to provide the reader with all of the information. They need know only that which will give them the ability to understand the local context and provide them with reasons for your conclusions.

## CONDUCTING A LABOR MARKET SURVEY

How do you construct interviews and questionnaires to assess employer/community attitudes regarding employee needs in the past, in the present, and in the future?

### DESIGNING A LABOR MARKET STUDY

Once you have reviewed your literature, you must design a method by which to gather the data needed for a detailed understanding of the actual economic and employment conditions prevailing within your community. To begin this process you will have to go back and look at the categories that appear to have the greatest significance for your study. There is no way to give you an absolute listing as to what is most or least important. We will make suggestions regarding some of those categories that are seen to be of major significance. But it is important that you realize that the idiosyncrasies of particular communities are important enough to require that these categories be shifted or dropped depending on how you ultimately envision your research.

Although in this manual we are assuming that each of you has little knowledge of the local labor market, the opposite may, in fact, be true. A word of caution is important here for those of you with substantial knowledge of the local labor market: Make sure that you take the next step. Regardless of your familiarity with the local conditions it is important that you ask others their opinions and report on those options as well as your own.

### LOCAL RESOURCE PERSONS

Your next step will be to contact community leaders, both public and private, and discuss with them the nature of the local labor market. A good starting point would be the local Chambers of Commerce, the Private Industry Councils, employment and training offices, state employment services, college and university faculty, business persons, reporters, local fraternal organizations associated with businesses, and the like. With these contacts you will be able to develop a list of resource persons who can be asked, individually or collectively, for their opinions regarding the local business and employment environment. As you discuss with them their opinions you will begin to pick up issues which are generic to the community and be able to note them for later study.

What questions should you ask when you meet with these people? At the outset you should provide them with an introduction as to who you are and what you are proposing to do. This will give them some notion as to the nature of your study and, hopefully, provide you with their support after you have completed your questioning. The introduction should be written, but does not necessarily have to be given to the

person to whom you are speaking. It will provide you with a guide to use when you speak with persons so that you will say the same thing to each. It is likely that they will compare notes in the future and you want to make sure that they see your activities as being consistent. The following example may be appropriate to use at this point as well as later on when more formal questions will be asked to the respondents:

"Good morning, Mr. Smith. My name is \_\_\_\_\_ and I am with the \_\_\_\_\_. I am conducting a study of the local labor market to determine the extent to which it will change over the next three years. Your name has been given to me as a person who understands the nature of our local business environment and labor market, and I would like to ask you some questions regarding your observations and opinions. I plan to present a report to \_\_\_\_\_ at the end of the study and certainly would appreciate any insights that you might provide me."

As you collect opinions from these people you will be looking for significant information, especially particular concerns associated with your local community. Particular concerns will include availability of qualified employees, attitudes of entry level employees, the closure or opening of industries that is expected to have a ripple effect, competition from other municipalities, and the like. Keep in mind that you are on the path of discovery, so make sure that you have sufficient time to let your respondents explore all of the areas of concern. You will also want to make sure that the respondents are aware of the fact that you are fairly knowledgeable of the relevant literature and research on the local labor market. Prove that you are interested in the field and that you value their opinions and attitudes.

With the collection of these data you will begin to develop a mental picture of the economic and employment community and the attitudes and opinions of leaders toward change and the future. As you collect these data you will want to begin listing issues for follow-up so that you can make sure that they are covered in your more formal research.

## QUESTIONNAIRE OR INTERVIEW?

You question whether you should use a questionnaire or interview? It depends on which is best suited for your particular circumstances. The questionnaire is more suited to large-scale surveys and to formal testing of ideas. The questionnaire provides a definitive base to the questions, can be distributed to a broader base of respondents, and, depending upon response rates, can generate a substantial amount of information over a large geographic area. The interview is most useful for examining the existence of particular patterns, allows the respondent to develop a broader response to the questions, and is limited by the number of persons that will be interviewing and the number of respondents who will be interviewed. You may choose to use the approach of an interview because it is more easily controlled and there is less development work that is required in constructing an interview.

## A SAMPLE INSTRUMENT

Presented below is a sample interview schedule. It by no means should be construed as the instrument that should be used by you. It was designed for a particular community and was used to project the number of entry-level positions that were available and might be available over the ensuing three-year period.

### PART ONE: IDENTIFICATION OF RESPONDENT

- 1) Name of Firm:
- 2) Address of Firm:
- 3) Name of Respondent:
- 4) Title and Position of Respondent:
- 5) Type of Business - What is the nature of your firm's operations?
- 6) Head Office or Branch Office: If other offices, how many?

### PART TWO: PAST AND PRESENT EMPLOYMENT

#### A. Present Employment Situation

- 1) How many employees do you have at present?  
Break into sex and full-time vs. part-time categories
- 2) How many employees do you have in each occupational category?  
Provide listing and allow for expansion where appropriate

#### B. Positions Filled in Past 12 Months

- 1) How many new employees have you hired over the past 12 months?  
Break into sex and full-time vs. part-time categories
- 2) Which occupational categories were filled during this period of time?
- 3) How many of these positions were entry level?
- 4) How many of these positions required previous work experience?
- 5) Did your firm hire any persons who could be associated with the following groups?  
Refugees  
Students  
Welfare Recipients  
Disabled  
Other, specify  
  
If no, why not?

Would you consider hiring these persons in the future?

Why or why not?

- 6) How many people left your employment during this period of time?

Which positions were vacated?

How long did employee stay in your firm?

Do you think this rate of turnover is low, normal, or high?

- 7) What is the average probationary period for new employees?

#### **C. Hiring Policies and Benefits**

- 1) How do you recruit your firm's employees?

For example: EDD, personnel agency, word of mouth, and/or media

Will you continue to use the same method(s) in the future?

- 2) What kind of compensation and benefit packages does your firm offer its employees?

For example: medical insurance, dental insurance, paid vacation

#### **D. Training**

- 1) Does your firm provide in-house training?

If yes, for what category of employees?

What is the duration of the training?

Which type of training?

If no, why not?

- 2) Has your firm hired students from a local education agency?

- 3) Has your firm ever hired employees from a CETA or JTPA training programs?

- 4) Has your firm ever hired a Targeted Job-Tax-Credit (TJTC)-certified employee?

- 5) Has your firm ever utilized publicly financed "on-the-job-training" funds to employ and train a new employee?

**E. Salary**

What are the salary ranges for each category of employee presently employed by your firm?

**PART THREE: FIRM'S FUTURE**

- 1) Do you expect that your firm will expand or decrease financially and occupationally in the next three years?
- 2) Identify job openings that you see emerging in your firm over the next three years:  
  
For example: newly created jobs and/or replacement jobs
- 3) Considering the new positions only, specify the qualifications and experience required, the salary levels and the benefits.

**HISTORY**

In considering the foregoing interview sample let us review the categories discussed above and the extent to which this schedule fills the requirements associated with that discussion. First, the schedule is broken into time components; the interview begins with the past 12-months, discusses the present, and then deals with the future. By placing the respondent in a time context he/she can provide information which flows from past through future as seen in the present, in a kind of summing-up process. It also allows us to understand how the employer sees the operation - past, present, and future - based upon his current concerns.

**CATEGORIZATION**

Second, the schedule provides categories to which the employer can relate - the business environment, employees, what they must do if they are to work at this establishment, how employees are selected, and so on. It also provides the interviewer with data associated with the work environment, and the numbers and kinds of employees both currently employed and projected into the future to work at the firm. By collecting data in the same way for each employer, the data lend themselves to being compared and matched when they are collated.

## CHANGE

Finally, factors associated with turnover, recruitment, and use of community resources provide a view of the employer's attitude toward change and development in the business. As these elements are presumably the determining factors affecting the future of the business, they represent the most difficult to collect. Questions associated with benefits, wages, and recruitment often cause difficulties in collecting, but are the most helpful in providing insight into the nature of the business and how it is or is not competitive in the community.

Once you decide which instrument you will use, you must construct it. There are a few rules that you should be aware of before you begin. These are:

- 1) You must be very careful in the wording of your questions. Respondents will vary greatly and you must be careful not to provide them with answers to the questions you are asking.
- 2) Do not assume too much knowledge on the part of the respondent. Although the person may be a very successful business person he or she may not understand your concerns for conducting a labor market survey.
- 3) Frame your questions so that the words are simple, straightforward, and clear.
- 4) Make sure you do not use words or phrases that may have an emotional meaning associated with them.
- 5) Your questions should sustain the interest of the respondent.
- 6) Place sensitive questions near the middle or end of the instrument.
- 7) Spread throughout your instrument with "why?" questions to check the adequacy of your questions and the understanding of the respondent.
- 8) Provide places where you can check the memory of the respondent as well as his or her accuracy.

Now let's consider the sample questions themselves in terms of their construction. As can be seen the questions are simple and straightforward. In those areas where the respondent is being requested to issue an opinion there is no hint as to the nature of the desired response. However, care must be taken that, if the respondent requests clarification the interviewer not introduce a bias when providing additional information about the question. For example, in the question associated with types of employees, make no hint that one is more desirable than the other. Also, the timing in asking questions is an important factor. The interviewer may ask the respondent to discuss benefits package and wage rates after the interviewer has had sufficient time to develop rapport with the respondent. Be sure that questions asking "why?" are evenly dispersed throughout the interview to provide a check on the responses. Finally, as designed, the interview questions should move back and forth from factual information to opinion responses to maintain the interest of the respondent.

## CONSTRUCTING A SAMPLE

There is much said about sampling in research, and most uninitiated persons shy away from even considering its use. Sampling provides the researcher with a method of assuring representativeness without questioning everyone. We look to providing a series of responses that reflect the actual environment that exists in the study population.

There are a broad number of sampling methods. However, in this manual we will only consider two: random sampling and stratified sampling. The random sample is drawn from the study population in a way that gives equal chances to all for being selected. There are a variety ways of constructing a random sample, such as using a sampling chart, or setting up a non-repetitive selective process, and so forth. The stratified sample carries with it the same selection process for those to be questioned but provides an overlay which assures that particular elements will be placed in the sample to guarantee representativeness.

### STRATIFIED SAMPLE

In the case of the studies that you will conduct, a stratified random sample is the simplest and most useful. It is important that the following three factors be included in your study. First is the size of the business. As there are small and large businesses in each community and the size of business usually proves to be a major factor in business development and employment opportunities, it would seem appropriate to break the sample into subgroups. Second, the type of business is often considered a major factor in wages and working conditions and should also be put into subgroups. Third, communities spread across a geographic area should have representation from all over the area in the sample. The first two factors are well represented in current research and are statistically arrayed, so it is a simple job of assuring that a proportionate number of each are included in the sample. The third factor area is represented in local data and reports, and lends itself to a similar kind of analysis. Other subgroups can be added depending upon the idiosyncrasies of the community. Just make sure that you select subgroups which can be easily arrayed and are clearly identifiable.

### SAMPLE SIZE

One of the most difficult research questions to resolve is the size of sample. It will depend on project finances, the categories in the analysis, the nature of the sample, and the purpose for which the data are collected. What is important is that you collect enough information to represent the community being studied. With as few as three subgroups and a business population of 10,000 or less, use a minimum sample 50 to 100. As the number of subgroups grow or the business population increases, so will the sample have to increase. Remember, you are not collecting information to be presented before a panel of social scientists for them to critique your sampling method. What you are trying to do is provide you, your colleagues, and a selected

audience with insight into your current and projected business and labor environments.

### SELECTING A SAMPLE

With the question of the number of businesses to be sampled answered, where do you go to select the actual businesses? The best approach is to arrange with the state employment service departments to give you the most recent listing of the Franchise Tax Board reports on businesses reporting withholding taxes. Although the information in this report is confidential, there are elements that can be released. If your local employment service manager can provide you with nonconfidential categories, you will have the best source for your sample. Short of being able to get this report, you can go to the Private Industry Council and county and city Chambers of Commerce for their lists of business members. Another method would be to select your sample from the yellow pages. These last two are not really suitable sampling methods, but in a crunch they will do. After you have selected your source document, utilize a random sample chart or construct a selection process which assures that there is randomness in the sample. For example, you have 10 pages of employers with 100 businesses on each page. Construct a sample where you select every tenth person on each page. Then create sample pages 1 through 10 and on sample page one, write numbers 1, 11, 21, 31..., on page two write 2, 12, 22, 32..., on page three write 3, 13, 23, 33, and so on until all numbers are entered on your sample pages. Again, the only thing you have to be careful of is that you construct the sample so that there is an impartial review of all businesses.

### TIPS ON ADMINISTERING THE INSTRUMENT

With the instrument constructed and a sampling method designed you are now ready to begin scheduling interviews with or sending out questionnaires to respondents. Now is the time that you will use the access you have developed with business and community leaders. As you took their valuable time to discuss with these persons their opinions and attitudes towards the local conditions, you should make sure that they see the usefulness of this study. If they support your work they may lend their influence and endorsement, and, you will be able to state to new respondents that you have the support of the local Chamber of Commerce, the Private Industry Council, and so on. This support is very important when asking a business person to take the time to respond to your questions, either in person or in writing.

You will also want to provide the respondent with reasons why it is invaluable to be a participant in the study. One reason to stress would be that the person has been specifically selected for the study. Another would be that the person will receive results of the study and will continue to be involved in the discussions that result. As you are also part of the community, you will be able to assure the participant of the continued interest in this information and that the person is playing an important role in the development of priorities and programs affecting the business community. And you can tell the person that you are developing contacts with employers that will allow the employers to help in designing training programs for local residents and employment opportunities for participants' own business.

### Questioning the Respondent

The interview must be seen, by both the respondent and interviewer, as an encounter between two people which is centered on questions but may have a number of emergent properties associated with it. The interviewer needs to control the mood, affect and involvement of the interview. Such activities as introductions ought to be made in a comfortable setting conducive to the development of rapport. Clarify the importance of the interview to the employer so that he or she acknowledges an interest to participate.

### Understanding the Business

In preparing to question a respondent, make sure that you familiarize yourself with the business sufficiently so that you appear to be interested in and knowledgeable of the person's enterprise. Respondents are like anyone else, if they believe that the person questioning them has at least a general idea of their environment they will be much more willing to participate.

### Providing Feedback to the Respondent

Make sure that the respondent sees the interview as having some relation to his or her world. Allow the respondent to answer questions, then provide the person with feedback regarding the materials being discussed. In this way you will establish rapport with the respondent in an interactional environment, which could lead to future discussions.

### Network Development

Provide situations during and after the interview for ongoing informal discussions and problem identification and solution. Discussing problems that are posed by the respondents and suggesting follow-up strategies can help to develop business networks which might be able to identify and solve particular problems. Also, if a business person has a particular competence or ability, provide opportunities where the person might be willing to offer those skills to a broader audience.

### Respondent Maintenance

It is important after you have completed your work with the respondent to maintain contact. This will provide you with the opportunity to ask more questions and to gain entry to potential future positions of the business. By setting up your interview as an interesting experience and by identifying common interests, the respondent will be more interested in maintaining a future relationship with you.

### Complaint Identification and Resolution

In most interviews respondents may misunderstand the nature or substance of a question. As long as you are able to quickly clear the misunderstanding, these concerns can easily be resolved to the respondents satisfaction. Reply to the respondents concern by restating the question, or provide an explanation of which does not suggest an answer. The important thing to remember is not to become reactive or defensive.

## WRITING UP THE RESULTS OF YOUR WORK

### INTERVIEW NOTES

At your interview, you will need to take notes. Do not try to write extensive notes regarding the response, just enough to be able to recall what the respondent said. It is important to provide the respondent with an active audience while you take notes. If you chose to use a tape recorder we suggest you make sure the respondent has no difficulty in taping the interview. Most respondents do not like to be taped and you will find that it limits the interview. Additionally, for it to be useful you will have to listen to the whole tape to recover the information, whereas notes provide you with a shorthand which allows you to recover only those points that are salient.

After you have completed the interview make sure that you write up a more detailed description of the results of the interview, immediately if possible, but no more than 12 hours afterwards. Try not to conduct more than three interviews before you write up the notes. Waiting for more than a day or trying to write up four or more interviews results in confusion between interviews and erosion of the actual data that is collected.

### CODING

Once you have completed a few interviews review your notes so that you can begin to pick out categories. These categories will be ones that you identify or construct yourself, or ones that emerge from the interviews. An example of the first case might be that you discover certain kinds of businesses regularly employ entry level persons, but do not use channels which are easily identified by job developers. In the second case you might find out that employers have established a means of screening entry level applicants that is more rigorous than is commonly practiced. As these categories emerge you will be able to develop them further by comparison with the new interviews that you complete. Using the structure of the interview itself as the outline for coding you will be able to organize the data in a way that will enhance analysis in the future.

The important thing to remember when you code your interviews is that you are looking for categories that repeat and that will help you assess the extent to which the labor market will increase or decrease, entry requirements within the labor market will change, and whether the nature of the labor market itself is constant. Over time certain categories will repeat often enough to saturate your data to become common elements in your sample.

## DATA ANALYSIS

By using simple statistical measures you will have a fairly simple job in presenting a statistical analysis of your research. In most cases your sampling method will use fewer than 100 interviewees so there is really no need to utilize more sophisticated statistical measures. Basically, there are three measures that you will probably want to use in your analysis.

- 1) **Gross Numbers** - Actual number of occurrences. This is a listing of analytical components of categories such as a listing of the number of businesses by industry type in a particular area. This gives the reader the actual size of a specific component. Gross numbers help by establishing the size of each component and giving a point of comparison with other areas.
- 2) **Percentage** - Ranges of numbers based upon the number 1. For your purpose, number 1 is your group made up of fractions, which are your categories. When you divide the categories by their groups, you will get percentages. With these percentages you can then see how your categories stand individually and in relation to the group. For example, by looking at business categories as numbers and percentages, the reader is able to visualize important aspects of the employment environment.
- 3) **Average** - The number which is most common to a group of numbers. Averages are computed by adding all of the numbers in the group, then dividing them by how many numbers you added. Averages are very helpful in understanding how different groups might be compared. Taking and comparing average entry level salaries of retail service businesses allows you to see which industry provides the highest beginning salary.

In writing up the results of your studies it is important that you utilize statistical measures so that abstractions are made clear and you prove the results of your study. All too often when research reports are constructed by lay persons, statistical analysis is omitted for fear of making an error. The result is that the data are included without analysis, and are usually too cumbersome and lengthy to understand in narrative form; the impact of the results are lost on your audience. By becoming familiar with the three statistical measures discussed above you will find that you can present a wealth of information quickly and clearly to your audience.

## ORGANIZING THE INFORMATION

After you have analyzed your data and developed your basic concepts you will have to organize the material in a way that convinces your audience the conclusions are justified. Keep in mind, all audiences need sufficient background information to understand the problem, agree with your approach to the problem, and agree that your data supports your conclusions.

To accomplish this task you will have to organize your information in a way that is meaningful and understandable and which brings agreement to your audience. First, present authoritative sources which support your conclusions. Then move into your data analysis showing how your results agree with the authoritative sources, making

comparisons among all of your data. And finally, provide your audience with a logical presentation. For example, you may see that there are more available jobs in the restaurant business than in any other business; but, turnover of entry level positions is very high because of very low salaries. Although the turnover creates available positions, it may be that these positions are not desirable placements because persons filling these positions cannot live on the wages paid by restaurants. By organizing the information properly, your audience will come to this conclusion before reaching the end of your report, and should support your conclusions.

### SHARING INITIAL RESULTS

After you have organized your information you will need to test it on your audience. Researchers are often criticized for their "Ivory Tower" approach to their work. This is mainly due to the fact that they do not test their ideas and conclusions with their audiences. It is essential for anyone doing research to gain input and agreement from their various audiences. The best method for doing this is to brainstorm your local committees and experts. They will often provide you with excellent insights into your conclusions and help you clean up unexplained phenomenon or loose ends. They also will help justify your conclusions if they agree with you before you distribute your report. Most importantly, remember that your audience will have general and specific interests as it relates to your report; try to pull out those interests so that they will be able to appreciate your findings.

### WRITING THE FINAL REPORT

In writing your final report you should follow a few simple rules.

- 1) Outline your report so that as you write you do not leave gaps in logic or confuse yourself regarding the conclusions you want to present.
- 2) Keep it simple and straight forward. Use the information that you have collected, but make sure everyone will be able to understand it.
- 3) In establishing categories make sure that you lay them out clearly, and provide them with names and relationships that make sense to your audiences.
- 4) Identify your most important conclusions and include only those in your report. Try not to include bits of information that are neither important nor supported by the majority of your data.

Now that you have completed this manual you should be able to take on the task of carrying out a labor market study within your community. As we stated at the outset, this manual has provided you with the basics of conducting such a study. It should not be construed as an in-depth how-to-book. Rather, it is an introduction which, if used properly, can provide you with a means to collect sufficient information and analyze this information so that you and your audiences can better understand the conditions of your local labor market.